What we claim is:

1. A device for heating and/or air-conditioning the passenger compartment of a motor vehicle, comprising an engine-cooling loop in which a heat-carrying fluid circulates for taking up heat from the engine and returning the heat to an air heater; a heat-pump loop in which a refrigerant fluid circulates, this loop containing a compressor, an evaporator constituting a cold source of the heat pump at which the refrigerant fluid takes up heat from the surroundings, and a condenser constituting a hot source of the heat pump at which the refrigerant fluid gives up heat, the condenser being integrated into the engine-cooling loop upstream of the air heater, the device further comprising an air-conditioning branch containing a condenser and an evaporator, the air-conditioning branch an upstream end connected to the heat-pump loop downstream of the compressor, and a downstream end connected to the heat-pump loop upstream of the compressor, and a switching device making it possible to make the refrigerant fluid circulate either in the heat-pump loop, or in the heat-pump branch, in such a way as to form a heat-pump loop.

2. The device of Claim 1, wherein the evaporator of the heat-pump loop is integrated into the cooling loop, upstream of the engine.

3. The device of Claim 1, wherein the evaporator takes up heat from surroundings external to the engine-cooling circuit.

4. The device of Claim 1, wherein the cooling loop includes control means which make it possible to control the quantity of heat-carrying fluid which passes through the evaporator.

5. The device of Claim 4, wherein the control means which make it possible to control the quantity of heat-carrying fluid which passes through the evaporator consist of at least one valve.

6. The device of Claim 1, wherein the cooling loop includes control means which make it possible to control the quantity of heat-carrying fluid which passes through the condenser.

7. The device of Claim 6, wherein the control means which make it possible to control the quantity of heat-carrying fluid which passes through the condenser consist of at least one valve.

8. The device of Claim 1, wherein the air-conditioning branch includes a refrigerant-fluid accumulator.

9. The device of Claim 8, wherein the evaporator constitutes a refrigerant-fluid accumulator common to the air-conditioning loop and to the heat-pump loop.

10. The device of Claim 1, wherein the air-conditioning branch includes an anti-return valve.

11. The device of Claim 1, wherein the heat-pump loop includes pressure-reducing means for reducing the pressure of the refrigerant fluid between the condenser and the evaporator.

12. The device of Claim 1, and further comprising a modular casing containing the evaporator, control means of the evaporator, the anti-return valve, the condenser, the control means of the condenser, the switching means and the pressure-reduction means of the heat-pump loop.

13. The device of Claim 1, wherein the engine is an internal-combustion engine.

14. The device of Claim 1, wherein the engine is an electric motor.